

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,048	02/04/2002 Pieter Van Dine		A34662	4945
22930 7	590 08/23/2004	EXAMINER		
	MON ARNOLD & W	COMAS, YAHVEH		
	GARET P. DROSOS, I EW PARK DR, BOX 7	DIRECTOR OF IP ADMIN	ART UNIT	PAPER NUMBER
	CH, VA 22042		2834	

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

•		Application	No.	Applicant(s)			
Office Action Summary		10/067,048		VAN DINE, PIETER			
		Examiner	_	Art Unit			
		Yahveh Cor	nas	2834			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠	Responsive to communication(s) filed on	27 July 2004.					
		This action is non	-final.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-15 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers						
· —	The specification is objected to by the Ex		~				
10)⊠ The drawing(s) filed on <u>1/16/04</u> is/are: a) accepted or b)⊠ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to See 37 CFR 1.434(d).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
Attachment	(s)						
	e of References Cited (PTO-892)	Interview Summary	•				
3) 🛛 Inform	e of Draftsperson's Patent Drawing Review (PTO-9- nation Disclosure Statement(s) (PTO-1449 or PTO/ No(s)/Mail Date <u>8/14/2003</u> .			lo(s)/Mail Date of Informal Patent Application (PTO-152)			

Application/Control Number: 10/067,048

Art Unit: 2834

DETAILED ACTION

Response to Arguments

Applicant's arguments, see pages 1-8, filed 7/27/2004, with respect to claims 1-15 have been fully considered and are persuasive. The rejection of claims 1-15 has been withdrawn.

Drawings

The drawings are objected to because applicant didn't provide a proper replacement sheet with the corrections. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-5 and 9-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. 6,150,747 in view of Cox U.S. Patent No. 5,717,263.

Smith discloses a stator, a rotor (10) supported for rotation within the stator (50), and a composite lamina arrangement provided on a surface of at least one motor component selected from the rotor and the stator a composite arrangement but fail to disclose that

Said composite arrangement is made of a first barrier which is impervious to liquids comprising at least one layer of polymeric resin material containing reinforcing fibers, a strength element surrounding the first liquid barrier, and including at least one layer of polymeric resin material containing an array of continuous high strength, high modulus fibers extending continuously around the motor component and a second liquid barrier which is impervious to liquid surrounding the strength element and comprising at least one polymeric resin material containing reinforcing fibers.

However, Cox discloses a composite rotor which according to his invention may be one of the known composites employed in the manufacture of rotors or known to be

suitable therefor having, a first barrier (32 and 46) which is impervious to liquids comprising at least one layer of polymeric resin material containing reinforcing fibers, a strength element (39 and 38) surrounding the first liquid barrier, and including at least one layer of polymeric resin material containing an array of continuous high strength, high modulus fibers extending continuously around the motor component and a second liquid barrier (46 and 50) which is impervious to liquid surrounding the strength element and comprising at least one polymeric resin material containing reinforcing fibers (see fig. 2 and column 1-lines 48-65) since this allows greater tolerance of the rotor structure to stress cycling. Cox also discloses that the fiber is selected form a group consisting of glass, carbon polyester and more, further disclose that different layers may be wound in different configurations, for example in different helical senses (column 1 lines 49-65). Cox states that the fiber of each layer of fiber may be wound singly inherently providing a veil cloth or a collection of fibers within the composite, for example as tows.

Referring to claims 10, no patentable weight has been given to the method of manufacturing limitations (i. e. dry lay-up resin transfer molding, wet and pre-impregnated, and filament winding techniques) since "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify Smith's invention and made a composite rotor having a first barrier which is impervious to liquids comprising at least one layer of polymeric resin material containing reinforcing fibers, a strength element surrounding the first liquid barrier, and including at least one layer of polymeric resin material containing an array of continuous high strength, high modulus fibers extending continuously around the motor component and a second liquid barrier which is impervious to liquid surrounding the strength element and comprising at least one polymeric resin material containing reinforcing fibers rotor since this would had been desirable to allows greater tolerance of the rotor structure to stress cycling.

5. Claims 6-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. 6,150,747 in view of Cox U.S. Patent No. 5,717,263 and in further view of Kohlhass et al. U.S. Patent No. 6,454,547.

Smith, as modified above, discloses the claimed invention except for the composite lamina arrangement has an exposed surface formed with a corrugation pattern to control the flow of liquid through the space between the rotor and the stator. However, Kohlhass disclose a rotor (4) with a corrugation pattern containing ridges (11) to control the flow of liquid through the space between the rotor (4) and the stator (6).

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify Smith's invention and made a corrugation pattern between the stator and rotor since this would had been desirable for control the liquid flow.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yahveh Comas whose telephone number is (571)272-2020. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic WARL TAMAINER PRIMARY EXAMINER Business Center (EBC) at 866-217-9197 (toll-free).

YC